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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,636	04/30/2001	Dave Russo	TI-27560.1	5138

23494 7590 08/23/2004

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EXAMINER

ZHEN, WEI Y

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 08/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/845,636	RUSSO ET AL.	
	Examiner	Art Unit	
	Wei Y Zhen	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-19 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-19 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 5-19 and 22 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Leary et al, U.S.

Patent No. 5,375,228.

As per claim 5, Leary et al discloses

performing real-time analysis of a target DSP chip (col.1 lines 5-11),

said target DSP chip operating in conjunction with a host computer (Fig. 2 and col. 3 lines 29-62),

storing, on the host computer, instructions for interpreting and processing statistics to be monitored (Fig. 2 and col. 3 lines 29-62 and col. 4 lines 39-51)

capturing, without any further processing, statistics regarding data to be monitored at the target DSP; and transferring the statistics to the host, and processing and interpreting the statistics at the host (Fig. 2 and col. 3 lines 29-62 and col. 4 lines 39-51).

As per claim 6, Leary et al discloses maintaining, on the target DSP chip, statistics based

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upon wait times for numerous real-time tasks (Fig. 2 and col. 3 lines 29-62 and col. 4 lines 39-51);

without storing or transmitting the wait time each time a real time task executes; and utilizing said statistics at a host to ascertain if said system is properly performing in real-time (Fig. 2 and col. 3 lines 29-62 and col. 4 lines 39-51).

As per claim 7, Leary et al discloses said computer system comprising a host computer and a target DSP computer (Fig. 2),

ascertaining, at said host computer, parameters of an application program (col. 3 lines 29-62 and col. 4 lines 39-51);

and in response to said step of ascertaining, automatically reconfiguring operating parameters of said target DSP computer so that time and space intrusion caused by real-time analysis of said target DSP is minimized (col. 3 lines 29-62 and col. 4 lines 39-66).

16. Apparatus for performing real-time analysis of a target DSP, said target DSP being arranged to communicate with a host computer, said apparatus comprising: means on said target for counting a number of occurrences of a predetermined event, for measuring a maximum value associated with said predetermined event, and for transmitting said number of events and said maximum value to the host; and means resident at said host for extracting real-time analysis data from any number of events and said maximum value.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leary et al, U.S. Patent No. 5,375,228.

As per claim 8, Leary et al discloses performing real-time analysis in a computer system, said computer system comprising a host and a target DSP (col. 1 lines 5-11, Fig. 2 and col. 3 lines 29-62).

inputting, information regarding an application program (col. 3 lines 29-62 and col. 4 lines 39-51);

and configuring, in response to said step of inputting, said target DSP to capture real-time analysis data during execution of said applications program on said target DSP with minimal intrusion of time and space on said target (col. 3 lines 29-62 and col. 4 lines 39-66).

Leary et al does not explicitly disclose a graphical user interface. Official Notice is taken that graphical user interfaces was well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching of the well known knowledge into Leary to input information via a graphical user interface because one would want to provide a user friendly user interface to facilitates the exchange of information.

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As per claim 9, Leary et al discloses obtaining real-time analysis data relating to a target DSP (col.1 lines 5-11),

said target DSP being arranged to communicate with a host computer (Fig. 2 and col. 3 lines 29-62),

maintaining at the target DSP, data related to a parameter; and utilizing said data to perform real-time analysis on the host (Fig. 2 and col. 3 lines 29-62 and col. 4 lines 39-51).

Leary et al does not explicitly disclose the data are count, sum and maximum value. Official Notice is taken that various types of data such as, count, sum and maximum value were well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching of the well known knowledge into Leary to have the data to be count, sum and maximum value because one would want to utilize various types of data to perform real-time analysis thoroughly and accurately.

As per claims 10-15, Leary does not explicitly disclose the parameter is interrupt latency, or CPU load or interrupt jitter or number of times a thread is executed or wait time or amount of data through a data stream. Official Notice is taken that various types of parameters such as, interrupt latency, or CPU load or interrupt jitter or number of times a thread is executed or wait time or amount of data through a data stream were well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching of the well known knowledge into Leary to have the parameter to be interrupt latency, or CPU load or interrupt jitter or number of times a thread is executed or wait

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time or amount of data through a data stream because one would want to utilize various types of parameters to perform real-time analysis thoroughly and accurately.

Claim 16 is rejected for the reasons set forth in the rejection of claim 9.

Claim 17 is rejected for the reasons set forth in the rejection of claim 9.

Claim 18 is rejected for the reasons set forth in the rejection of claim 9.

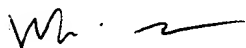
Claims 19, 22 are rejected for the reasons set forth in the rejection of claim 10-15.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wei Y Zhen whose telephone number is (703) 305-0437. The examiner can normally be reached on Monday-Friday, 8 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wei Zhen

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Primary Examiner

8/19/2004